

# The Role of the Instructor in Web-Based Instruction: Are We Practicing What We Preach?

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## Editorial

A recent article in *The Chronicle of Higher Education* reports research conducted by Robert. P. Ouellette, director of technology-management programs at the University of Maryland, University College. His conclusions are that professors who recognize the different learning styles among their students and the differences between distance and face-to-face programs have more-successful online courses (Carnevale 2001).

Ouellette recommends that material presented in distance formats be presented in ways that incorporate both text and graphics because successful distance learners tend to be more visual. He has found distance students to be split about evenly between global and sequential thinkers, so recommends that "big pictures" and step-by-step process explanations be incorporated.

While group work in face-to-face classrooms is relatively easy to accomplish, Ouellette found that group work at a distance is problematic, but nevertheless a necessary skill to be developed.

This research report dovetails neatly with the research reported in this month's article by Laura LaMonica. She determined, from a literature search, what constitutes best practices in Web-based distance instruction, and then sought verification of her selection from both instructors and students. Taking that one step further, she investigated the use of those best practices from the point of view of both students and instructors.

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## The Role of the Instructor in Web-Based Instruction: Are We Practicing What We Preach?

Laura LaMonica

### Introduction

While theories abound regarding how the field of education and training will grow and develop during the twenty-first century, there is a general consensus that Web-based instruction will play a prominent role. "The widespread availability and access to the Internet, a student population that is increasingly non-traditional, and occupational forces that require worker re-education, have fueled the avalanche of Web-based courses in higher education" (Miller and Miller 1999). Since it is apparent that the growth of Web-based instruction will continue, educators have a responsibility to address their role in this trend and wield its power wisely. This study examines the use of best practices identified in the literature in the instruction of Web-based courses.

### Review of Literature

For purposes of this study, Web-based instruction is defined as delivery of educational or training materials to a student(s) via the Internet that includes hyperlinks and communication capabilities. Specifically, this project examines Web-based learning that is led or facilitated by an instructor. Distance learning encompasses any form of instruction in which the instructor and student are separated by location, and often also by time.

In order to examine best use of Web-based instruction, it is important that the educator understand the typical student. The research surrounding the characteristics of an effective distance learning student generally agrees: students should be mature, assertive, self-disciplined, and independent (Buchanan 1999), should be able to shape and manage change (Rogers 2000), and, most importantly, must be highly motivated and possess well-developed, self-directed learning skills (Carlson and Repman 2000). What has been less researched-but is of significant importance to instructors of Web-based courses-is what students of Web-based instruction are really like. Conrad (1999) asserts that self-direction is a learned trait and is, therefore, not necessarily present in all students participating in Web-based courses. She cites the work of G. Grow and defines four stages of learners that an instructor may actually encounter in any Web-based course: dependent, interested, involved, and self-directed. Conrad states that instructors should, in fact, "assume that all learners are at the early stage of self-direction" (111). Given the surge of popularity of Web-based instruction, it seems probable that a student may not meet the desired profile of a good distance learner and, instead, may fall into one of Grow's lower-level categories. Carlson and Repman (2000) state "We find that students who are successful in distance learning environment tend to be mature, highly motivated, and possess well-developed

self-directed learning skills. That may not describe our average student" (12). This is a situation that impacts online instruction and certainly merits closer examination.

If it can't be assumed that all students in a Web-based course possess desirable qualities for a distance learner, then the role of the instructor in such a situation becomes even more important. Much has been written on instructor effectiveness in a Web-based environment. A veritable list of best practices can be generated:

??? State expectations of students and the course clearly and early (Conrad 1999; Berge 1995; Verneil and Berge 2000; Carlson and Repman 2000; Palloff and Pratt 1999).

??? Structure content so that it is easy to follow (Conrad 1999; Miller and Miller 1999).

??? Provide regular feedback and guidance to the students (Conrad 1999; Verneil and Berge 2000; Miller and Miller 1999; Berge 1995).

??? Provide an opportunity for students to give feedback regarding learning and course progress (Conrad 1999; Miller and Miller 1999).

??? Strive for participation by all students (Berge 1995; Palloff and Pratt 1999; Verneil and Berge 2000).

??? Promote collaborative learning (Conrad 1999; Verneil and Berge 2000; Berge 1995; Miller and Miller 1999; Palloff and Pratt 1999).

If all of this information is available to educators at minimal effort, the question that begs to be asked, then, is "Are we using it?" A recent study by Hara and Kling (1999) suggests that the answer is "No, not effectively enough." In this study, the researchers followed a group of eight graduate students participating in a Web-based course at a major U.S. university. Specifically, the study examined closely the frustrations students experienced during the semester with regards to the online class. The researchers found that students experienced a high amount of frustration originating from three major sources: technological problems, minimal and poorly timed feedback from the instructor, and ambiguous instructions on the Web site as well as via e-mail. The researchers concluded that the cause of these phenomena was that "an experienced administrator and online teacher misperceived the kinds of pedagogical shifts required from face-to-face teaching and underestimate[d] the extent to which mentoring could be critical" (27).

Are educators taking this necessary shift seriously or regularly underestimating it? Palloff and Pratt (1999) agree that the latter may be true:

"The shift to online learning poses enormous challenges to instructors and their institutions. Many faculty and administrators believe that the cyberspace classroom is no different from the face-to-face classroom and that approaches used face-to-face will surely work online. Many further believe that all that is needed to successfully teach online is to "convert" the course material." (349)

In the stampede to structure and lead a Web-based course, educators may be overlooking the accompanying difficulties and ignoring an important observation-"a good classroom professor is not necessarily a good online professor" (Rogers 2000, 23).

Teaching online is a new experience, different from teaching in a classroom. It requires a different set of skills and a different pedagogy. It is so different, in fact, that an online instructor with the University of Washington renames the process "webagogy" (Ells, cited in Carlson and Repman 2000, 11). Plainly, developing a new pedagogy can be neither a fast nor an easy process. Still, in this ever-developing world of amazing technological advances, it is easy to forget that "technology does not teach students; effective teachers do" (Whitesel, cited in Palloff and Pratt 1999, 350). When instructors and educational institutions ignore this necessary development and forge ahead, their students cannot learn effectively.

This article seeks to determine if the results found by Hara and Kling are unique or representative of a larger issue in online instruction.

### **Purpose**

Central to this study is the list of best practices identified in the literature review as characteristic of effective instruction in a Web-based setting. The purpose of this study was to determine to what extent instructors are consistently implementing the guidelines identified by the literature in their standard online courses.

### **Design**

A survey methodology was used to capture data relating to the frequency of use of these best practices in an educational and/or training setting. A questionnaire was the primary data collection instrument. The questionnaire was designed for two distinct audiences: educators and trainers who have taught or are teaching a course online, and learners who have taken or are taking a course online. The questionnaires were nearly identical, but were tailored to address each individual target audience and evaluated as separate tools. The questionnaires were distributed as online forms via listservs dedicated to training and online learning.

Survey questions could be categorized as one of the following types: ranking, scale, and quantity. Responses to the survey questions were interpreted to determine the value that the instructors and students assigned to nine best practices of Web-based instruction, as identified by the literature:

??? Expectations of the student by the instructor are stated clearly;

??? Expectations of the student by the instructor are stated early;

??? Course content is structured so it is easy to follow;

??? Adequate content is provided;

??? Regular feedback to the student is provided;

??? Regular guidance for the student is provided;

??? An opportunity for students to give feedback is provided;

??? Participation by all students is encouraged and facilitated;

??? Collaborative learning is promoted.

Additionally, instructors' responses were assessed to determine how often they utilized each of the best practices in their Web-based courses. Student responses, likewise, were assessed to determine how often the best practices were utilized in courses in which they were enrolled.

Finally, instructor questionnaire data was analyzed to determine the amount of experience instructors had in teaching Web-based courses. Likewise, student questionnaire data was analyzed to determine the amount of experience students had in studying in web-based courses.

The instructor questionnaire data was examined to determine if there was any correlation between quantity of experience and use of the best practices in a web-based course by instructors. Additionally, the student questionnaire data was examined to determine if there was any correlation between student overall opinion of a course and use of best practices by instructors of Web-based courses.

### **Preliminary Results**

In a preliminary analysis of the data, the results from both sets of surveys were interpreted separately to draw general conclusions regarding the use of best practices in Web-based courses from the viewpoints of students versus the viewpoints of instructors. A total of 171 students and 105 instructors participated in the survey.

Of interest is the value that the instructors and students assigned to the list of best practices. Students and instructors were given a list of the identified best practices and were asked to rank which was the most important and which was the least important to them. One hundred percent of student and instructor participants identified one of the best practices as most important. Both groups consistently agreed that the most important best practice was *course content is structured so it is easy to follow*. About the same number of students as instructors felt that *regular feedback to the student* is an important characteristic of a Web-based course. Students placed considerably more value on *expectations of the instructor stated clearly* and *the provision of adequate content*. *The opportunity for students to provide feedback* was endorsed by no instructors and few students as a most important practice.

One hundred sixty-one students (94%) and 97 instructors (92%) agreed that *promoting collaborative learning* was the least important best practice. Many more students than instructors, however, felt that *stating instructor expectations* clearly was less important. Instructors placed less value on *providing adequate content* than did students. In fact, approximately the same number of students ranked that best practice as most important as did instructors who ranked it least important. Instructors were evenly divided as to how important regular guidance to the student is. Students were fairly evenly split on their opinions of the importance of encouraging and facilitating participation by all students.

Not surprisingly, instructors felt that they are always utilizing best practices in their Web-based courses. The best practice most consistently ranked as "always used" by instructors was *stating expectations early*. A close second in ranking was *providing an opportunity for students to give feedback*. The best practice ranked most important by instructors and students, *structuring content so it is easily followed*, was reported "nearly always incorporated" by instructors. The best practice ranked least important by instructors and students, *promoting collaborative learning*, showed slightly heavier responses in the "sometimes" and "frequently" categories.

Students ranked instructors lower on frequency of use of nearly all best practices than did instructors to the same question. In the experiences of the students who completed the survey, instructors utilized best practices frequently, but not always. Used least frequently was *promoting collaborative learning*, a practice considered least important by both students and instructors. The best practice identified as most important by both students and instructors, *structuring course content so it is easy to follow*, was used frequently in the experience of the students, less often than always. Interestingly, the strongest "always" response from students and instructors was in *providing an opportunity for students to give feedback*, a practice previously generating zero to low responses from both parties as a most important best practice.

Sixteen instructors (15%) indicated that they had taught four or more web-based courses. The sixteen participants ranked themselves highly on "always" and "frequently" responses to all best practices, with the strongest agreement on providing an opportunity for student feedback. Instructors were least likely to *provide adequate content*, a value most instructor participants consistently ranked among the least important. The best practice identified by instructors as most important, *structuring content so it is easy to follow*, received high "always" responses.

Twenty-eight (27%) instructors indicated that they had taught no more than one Web-based course. On the whole, those instructors who had taught four or more Web-based courses claimed to use best practices with even greater frequency. Instructors indicated that they provide feedback on a less-regular basis than the more-experienced instructors and provide less opportunity for collaborative learning. Less-experienced instructors also provide fewer opportunities for students to provide feedback. These instructors did, however, rank themselves considerably higher on *structuring course content so it is easy to follow*, the practice ranked most important by instructors.

One hundred twenty-three (72%) of the participating students indicated that their experience in a Web-based course was somewhat to very positive. The data indicates that best practices were used consistently in the courses in which students felt they had a positive experience. Even with less-frequent promotion of collaborative learning, students felt their experience was positive.

Forty (23%) student respondents indicated that their learning experience in a Web-based course ranged from neutral to very negative. Students with negative experiences indicate that best practices were used less frequently than did those with positive experiences. There was a higher incidence of "sometimes" and "rarely" responses than in any other survey group. Of the students who indicated that their experience was neutral to very negative, only 4% responded "always" with regard to the use of the best practices. In contrast, of the responses from the students with positive experiences, 32% indicated best practices were "always" used. There was also a higher incident of "never" responses from students having neutral to very negative experiences.

## Conclusions and Implications

Instructors and students of Web-based courses agree fairly closely that the following elements are most important:

??? Course content is easy to follow;

??? Regular feedback to the student is provided.

Students, however, placed considerably more emphasis on the provision of adequate content and a clear statement of expectations by the instructor.

Clearly, the instructors of web-based courses that participated in this survey believe they are frequently using the best practices identified in the literature. Student survey data, while not quite as favorable, does support their claim. This is encouraging news for both interested parties.

Survey data does not support the notion that inexperienced instructors (instructors who have taught only one Web-based course) use best practices less frequently. Instead, it indicates that instructors are utilizing best practices regularly in their Web-based courses regardless of their level of expertise. This indicates a stronger knowledge base in new instructors about the requirements of effective online instruction than the researcher presumed.

It is apparent from the survey data that, when these best practices are not utilized frequently, student opinion about the Web-based course suffers as a result. This supports all of the literature from which these best practices were derived. It behooves students and instructors of Web-based courses to continue to utilize these best practices as often as possible.

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